

bargaining relation between incumbents and new entrants: 1) ILECs and electric companies each own or control a comparable number of poles; 2) ILECs and electric companies are reliant on each other to complete their rights-of-way networks, since their poles are not overbuilt; and (until the 1996 Act) neither ILECs, nor electric companies, were prepared to enter the other's business. Reliance on the other to complete one's network created an incentive to share facilities; and the comparable distribution of poles and the mutual exclusion of lines of business, established parity of negotiating power, which in turn is a necessary condition for achieving just and reasonable rates through negotiation.<sup>27</sup> Relations between incumbents and new entrants do not satisfy these conditions. At times, the electric utilities recognize this difference.<sup>28</sup>

B. The Commission Must Set Cost-based Rates

Without the continuation of a cost-based presumptive maximum rate it will not be possible for the Commission to be certain that incumbent utilities have met the Congressional mandate to "...apportion the cost of providing space on a pole, duct, conduit, or right-of way other than the usable space among entities so that such apportionment equals two-thirds of the cost of providing space other than the usable

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<sup>27</sup> However, USTA contends that negotiated rates between incumbent LECs and incumbent electric companies dramatically favor the electric companies. USTA, Appendix 2, Table 2.

<sup>28</sup> "Given the significant economies of scale realized by joint pole use, both (incumbent) industries found it in their mutual interest to reach agreement on a cost-sharing arrangement, and regulation of pole attachments rates was not required. Later, as an accommodation and not as a central part of their business, some electric utilities allowed cable companies to attach their lines to certain of the electric utilities' distribution poles." EUC at 6.

space that would be allocated to such an entity under an equal apportionment of such costs among all attaching entities,"<sup>29</sup> and to "...apportion the cost of providing usable space among all entities according to the percentage of usable space required for each entity."<sup>30</sup> Unless the market for rights-of-way is effectively competitive, and it is not, market rates negotiated in the absence of a presumptive cost-based maximum will be above economic cost, discriminatory, and in violation of the Congressional mandate on utility companies to equally apportion common right-of-way costs.

**C. The Commission May Not Adopt Pole Attachment Rates Based on Forward Looking Cost Estimates**

The electric utilities recognize that §224(d) requires the Commission to regulate pole attachment rates for CATV and new entrants until 2001 in accordance with underlying costs.<sup>31</sup> In their effort to raise pole attachment rates, the electric utilities advocate the Commission use a flawed version of forward looking costs as the underlying cost standard. MCI has been a strong and consistent proponent of properly conceived forward looking cost estimates for interconnection and unbundled network element rates. MCI also believes that a properly conceived forward looking cost estimate of pole attachment costs would yield declining rates over time.

However, §224(i) of the 1996 Act appears to preclude the use of forward looking cost methods for regulating pole attachment rates. The Commission has traditionally

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<sup>29</sup> 47 C.F.R. §224(e)(2).

<sup>30</sup> 47 C.F.R. §224(e)(3).

<sup>31</sup> See e.g., EUC at 5.

interpreted §224(d)(1) as requiring it to set a maximum rate so as to recover embedded historical costs. This permitted the Commission to allow the recovery of forward-looking costs through non-recurring, make-ready charges, where the attachee pays for all of the modification cost. §224(l) appears to codify the recovery of forward-looking costs through non-recurring, make ready charges, rather than through recurring rates.

Suppose, for example, that a new entrant's desire to attach to a pole could only be accommodated with the replacement of a 30 foot pole by a 40 foot pole. Under the existing pole attachment regulations, the new entrant would be completely responsible for the additional investment. Under a forward looking cost methodology, the utility company would be required to estimate the cost of the most efficient network design on a going-forward basis. Under this method, the investment required for 40 foot poles would be recovered through recurring charges placed on existing attachees. However, §224(i) appears to preclude levying upgrade costs on existing attachees.<sup>32</sup>

The electric utilities contend that the connection between unbundled network elements and rights-of-way supports replacing existing pole attachment cost methodologies with forward-looking cost methods.<sup>33</sup> However, Congress treated access to rights-of-way differently than unbundled network elements. Congress explicitly indicated that pole attachment rates were to be regulated differently than

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<sup>32</sup> EEI at 15, supports the argument that a forward looking cost would method would preclude recovering upgrade costs through make-ready charges. However, EEI does not consider whether §224(l) prohibits the use of forward looking cost methods.

<sup>33</sup> AEP at 24.

interconnection rates and unbundled network elements, since §251(b)(4) requires all LECs to make their rights-of-way available at terms and conditions consistent with §224 rather than with §251(d)(1).

D. Properly Implemented Forward-Looking Estimates Indicate Declining Pole and Conduit Rates and Increasing Usable Communication Space on Poles and Conduits

In the event the Commission does consider forward-looking cost methods to regulate the rates for pole attachments, MCI takes this opportunity to rebut two major misconceptions fostered by the Electric utilities regarding the implementation and outcome of a forward-looking cost methodology.

1. Basing forward-looking replacement costs on opportunity costs violates proper forward-looking methods

The Electric utilities contend that the forward-looking cost of poles and conduits includes the "...opportunity cost associated with their investment."<sup>34</sup> However, the opportunity cost of an investment will yield competitive cost levels only if the market opportunities under consideration are *competitive* market opportunities. In non-competitive markets, the opportunity cost of an investment can be far above economic cost.

Basing rates on the opportunity cost of investments is tantamount to letting the utility companies extract all the rents associated with those investments. Rents are earnings above competitive levels that are attributable to a unique or special condition or quality. In a competitive market, rents may be the result of innovative management,

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<sup>34</sup> Reed at 46.

innovative marketing techniques, or use of a special processing material. In a competitive market such rents legitimately accrue to the company.

The utilities have been granted the use of a scarce resource by public authorities by virtue of being the incumbent utility company, not as a result of special management effort. Consequently, any rents that result from using an opportunity cost valuation of replacement cost associated with rights-of-way, should accrue solely to the utility's regulated customers. The utility's investors may not share in those rents. It is not the conduit or the pole that is scarce, but the right-of-way — and that is solely attributable to the franchising authority.

The electric companies fail to make provisions to completely return these rents to their regulated customers. With the expansion of incentive regulation and deregulation they anticipate removing an increasing share of these rents to their shareholders. Since the Commission does not have the jurisdiction to ensure the complete return of these rents to the electric utility's regulated customers, it may not adopt opportunity cost valuation as a means of estimating the replacement cost of a utility's assets.

This conclusion is in full accord with the position the Commission adopted toward opportunity cost valuation in its Interconnection Order. In that Order the Commission considered the recovery of opportunity costs associated with a utility's assets to be a violation of a proper forward-looking cost methodology.<sup>35</sup>

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<sup>35</sup> "We conclude that the ECPR is an improper method for setting prices of interconnection and unbundled network elements because the existing  
(continued...)

2. Forward-looking estimates must account for tremendous increases in pole and conduit capacity and reductions in pole and conduit investments and maintenance costs

One of the advantages of using a forward-looking cost methodology is it permits one to better approximate the rates that would be set in a competitive market. These rates would be efficient and least cost. One would consider building the incumbent's network using the most efficient network configuration, the most efficient technologies, and the most efficient installation techniques. A number of technologies either currently employed, or soon to be employed, will dramatically increase the availability of pole and conduit space available for telecommunications attachments, and reduce the forward-looking cost of poles and conduit.

- a. Excess capacity

One way in which forward-looking estimates would increase the estimate of available pole and conduit space is to account for the unused capacity of electric companies existing communications attachments. EPRI claims that "...utilities use only about 3% of the capacity of these elaborate communications webs for their own purposes. As one utility executive put it, '[w]e're sitting on a gold mine.'"<sup>36</sup> One would also increase usable space by using the most efficient, least cost, and least space-

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<sup>35</sup> (...continued)  
retail prices that would be used to compute incremental opportunity costs under ECPR are not cost-based." Interconnection Order at ¶709.

<sup>36</sup> Leslie Lamarre, *At Home with Telecommunications*, EPRI Journal, January/February, 1997 at 2, [http://www.epri.com/epri\\_journal/jan\\_feb97/9.telecom.html](http://www.epri.com/epri_journal/jan_feb97/9.telecom.html). See Attachment 2 collects all articles cited pertaining to forward looking construction, installation, and maintenance costs.

using technologies to accommodate the electric utility's communications needs. A radio-based, or wireless system may be all that is needed to manage the utility's load management, and meter-reading activities.

b. Construction techniques

Advanced construction technologies are another way in which forward-looking methods will increase usable capacity, and reduce forward-looking costs.

- ▶ EPRI reports that newly available horizontal drilling rigs are able to replace much more expensive open-trench techniques based on "cut-and-fill" technology.<sup>37</sup>
- ▶ EPRI reports that newly designed cable pushers, and pulling rope that injects a lubricant at the pulling eye, "successfully pulled XLPE transmission cables the entire length of the run without joints."<sup>38</sup> The net savings from these new construction technologies amounted to just under one-half million for 2,400 feet of cable. EPRI reports this technology results in a 20% reduction in installation costs.<sup>39</sup>
- ▶ Trenchless boring techniques permit the installation of pipe 6 feet deep without disrupting traffic or other business activities.<sup>40</sup>

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<sup>37</sup> These drilling rigs can "...drill to 1200 feet and pull in pipes up to 18 inches in diameter. Previous technologies could not economically drill at such lengths or provide the power to pull in the ducts required to install transmission-class cables." *EPRI Recent Publications*, Document IN-103141, at 2;  
<http://www.epri.com/pdg/trans/targets/under/publications/innovators/in103141.html>

<sup>38</sup> *Ibid.*

<sup>39</sup> *Under Ground Transmission*, EPRI Web Site,  
<http://www.epri.com/pf97/ts/ts3.html> at 1.

<sup>40</sup> *Cannon Uses Directional Drilling to Complete 30,000' for AT&T, Pipeline and Utilities Construction*, December 1994, at 26.

c. Transmission & control technologies

Recent developments in transmission & control technologies will also reduce construction costs, and increase usable space:

- ▶ EPRI reports new transmission conductors permit greater electric al capacity to be transmitted over existing wires in order to meet growing demand, thereby avoiding investment in additional electric cable to existing facilities.<sup>41</sup>
- ▶ Electric utility companies can also expect to see greater loads being carried on transmission facilities at replacement costs up to one-fourth the foundation replacement cost of existing upgrades.<sup>42</sup>
- ▶ EPRI reports that new dielectric materials used to retrofit existing ducts and cables can increase transmission capacity, permitting underground cables to have transmission capacity equal to overhead cables.<sup>43</sup> (This will reduce the forward-looking estimate of electric cables required in conduit systems, making more space available for communication purposes).
- ▶ New electronic devices permit dramatically increased control over the flow of electricity over the grid. This permits a redesign of power delivery systems yielding a 50% increase in line capacity,<sup>44</sup> and a proportionate decrease in numbers of cables attached to poles and conduits.<sup>45</sup>

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<sup>41</sup> "Improved conductors that exhibit less sag, higher strength with less weight, longer life spans, and increased corrosion resistance can help utilities increase power transfer over existing rights-of-way. They can also reduce O&M costs, cut costs for upgrades, and permit the operation of lines at higher temperatures." *Transmission Conductor Applications and Advancement*, EPRI, [http://www.epri.com/pf97/pdg/ts/ts2\\_7.html](http://www.epri.com/pf97/pdg/ts/ts2_7.html).

<sup>42</sup> *Capacity Evaluation of Existing Foundations*, [http://www.epri.com/pf97/pdg/ts/ts2\\_16.html](http://www.epri.com/pf97/pdg/ts/ts2_16.html).

<sup>43</sup> *New Extrudable Dielectrics*, [http://www.epri.com/pf97/pdg/ts/ts3\\_3.html](http://www.epri.com/pf97/pdg/ts/ts3_3.html).

<sup>44</sup> *EPA Wants Utilities to Prevent More Air Pollution after Deregulation*, Energy Report, February 26, 1996, No 8, vol 24.

<sup>45</sup> *Unified Power Flow Controller: the Ultimate FACTS Device*; Flexible AC  
(continued...)



- ▶ New optical voltage sensors will replace oil-filled voltage transformers. These optical sensors have greatly reduced environmental and safety risk, reducing maintenance expenses and overheads.<sup>46</sup>
- ▶ Solid dielectric cables are replacing high-pressure fluid filled transmission cables located in underground conduit, thereby reducing environmental and safety-related maintenance costs; and at the same time increasing capacity per cable, permitting fewer cables per conduit.<sup>47</sup>
- ▶ Forced cooling systems permit additional power to be transmitted over existing cables, thereby freeing up conduit space on a going forward basis.<sup>48</sup>

#### d. Pole technologies

Electric utility companies can also expect to reduce a variety of pole maintenance costs.

- ▶ EPRI reports they have developed a fiberglass pole that reduces both replacement and maintenance costs of existing wood poles.<sup>49</sup>
- ▶ EPRI also reports that electric al engineers currently overestimate wind loads placed on their transmission facilities. More realistic wind load estimating methods, and more accurate wind maps, are expected to

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<sup>45</sup> (...continued)  
Transmission System, Modern Power Systems, volume 16; no. 4, at 57.

<sup>46</sup> *Focus on Transmission Control Centers*, Electric Light & Power, March 1996, at 19.

<sup>47</sup> *Con Edison Increases of Environmentally Friendly Cable*, Electrical World, April, 1996, at 27.

<sup>48</sup> *Forced-cooled Cable Serves Urban Area*, Electrical World, February, 1992, Vol 206, No. 2, at 63.

<sup>49</sup> *Transmission Structural Advancements*,  
[http://www.epri.com/pf97/pdg/ts/ts2\\_15.html](http://www.epri.com/pf97/pdg/ts/ts2_15.html).

reduce forward-looking line upgrade costs.<sup>50</sup>

- ▶ EPRI reports that new methods of identifying trees that impinge on pole and other facilities will reduce vegetation management costs 10-20% and reduce tree-caused line outages.<sup>51</sup>

#### **IV. Pole Issues**

##### **A. Usable Pole Space Has Marginally Increased**

The Electric utilities repeat the claims, first stated in the Electric Whitepaper, that the average height of a pole has increased from 37.5 feet to 40 feet.<sup>52</sup> As in the Whitepaper, they offer no evidence supporting this claim in their Comments. Other parties do offer evidence regarding average pole height. Combining the data for the pole heights supplied by Time Warner and NCTA, one finds the average pole height is now 38.8 feet, an increase of one-half foot.<sup>53</sup> If this data is reliable, the Commission may increase the presumptive pole height by one-half foot.

##### **B. The Record Supports Retaining 30 Foot Pole Costs in Average Net Investment Calculations**

By itself, increasing the average pole height does nothing to further the electric utilities' goal of increasing pole attachment rates. It would actually reduce existing

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<sup>50</sup> *Local Sources of Wind Loading, and NEXRAD for Local Wind and Ice Data*, [http://www.epri.com/pf97/pdg/ts/ts2\\_18.html](http://www.epri.com/pf97/pdg/ts/ts2_18.html).

<sup>51</sup> *Right-of-Way Vegetation Management*, [http://www.epri.com/pf97/pdg/ts/ts2\\_24.html](http://www.epri.com/pf97/pdg/ts/ts2_24.html).

<sup>52</sup> AEP at 48; EEI at 26; Ohio Edison at 12.

<sup>53</sup> This weighted average pole height is based on the heights of poles considered by the Commission in 1978: 30, 35, 40, and 45 foot poles. See, NCTA, Exhibit 3; and Time Warner, Attachment B.

attachees' share of usable space. One way the electric utilities seek to increase rates is by removing 30 foot poles from their accounts. They argue that 30 foot poles do not permit the placement of communications cables. Since 30 foot poles are less expensive, average net investment would increase, and so would rates. Once again, the electric utilities do not provide evidence that 30 foot poles are incapable of multiple attachments. However, other parties do show that multiple attachments are possible and routinely occur on 30 foot poles.<sup>54</sup> For example, US West shows that 75% of its 30 foot poles have an electric and telephone attachment, and 18% of its 30 foot poles have at least 3 attachments.<sup>55</sup>

C. The Record Does Not Support Allocating Safety Space to Other-than-Usable Purposes

Another way the Electric utilities attempt to increase pole attachment rates is by allocating the 40 inch safety space from electric purposes to "other-than-usable" purposes. This would transfer two-thirds of the cost of this space away from the electric utility companies in accordance with §224(e)(2) of the 1996 Act. The electric utilities argue that the National Electric Safety Code (NESC) requires the safety space only because of communications' attachments. They contend that "but for" the attachment of communications' cables by cable and telecommunications' companies, the 40 inch safety space would not be needed. As EEI states: "[s]afety space exists

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<sup>54</sup> Time Warner, Attachment A; MCI at 13; NCTA at 15; AT&T at 19; SBC at 38.

<sup>55</sup> US West, Attachment 2.

only because of, and for, attaching entities."<sup>56</sup>

Two crucial pieces of information contained in the NESC are omitted by the electric utilities, both related to electric utility entry into telecommunications. First, the electric utilities fail to mention that the NESC permits a standard communication cable<sup>57</sup> to be placed in the electric supply space.<sup>58</sup> Such communications' cables placed in the supply space only require 16 inches of clearance from electrical supply cables if work is done on the communications' cables by the electric utility.<sup>59</sup> Second, if the communications cable is either all dielectric fiber optic cable, or fiber optic cable supported on a messenger that is entirely dielectric; and the electric company places it in the supply space, no clearance is required.<sup>60</sup>

The implications of this information are quite startling. Now that the electric utility companies are able to enter telecommunications, they may place their fiber communications cables anywhere in the safety space, and may place their copper communications cables from the bottom of the safety space to 16 inches from the top of the safety space. At the same time, by having this space assigned to "other-than-

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<sup>56</sup> EEI at 29; AEP at 51.

<sup>57</sup> "Insulated communication cables supported by an effectively grounded messenger." NESC Rule 224.A.2.a. See Attachment 4 for a compendium of cited NESC rules.

<sup>58</sup> Table 235-5: Vertical Clearance Between Conductors at Supports, 1997 NESC.

<sup>59</sup> *Ibid.*

<sup>60</sup> NESC Rule 230.F.1.b, and Table 235-5, footnote 11.

usable", they will be able to deny other telecommunications companies access to this "safety space" if they wish. Thus, precisely at the moment the electric utilities are claiming the safety space is not usable, they are able to make complete use of it for their own communications' purposes. The electric utilities are proposing to transfer two-thirds of the cost of the safety space to their competitors, deny their competitors access to that space, and use it to compete against telecommunications companies. All their arguments about "safety" and "non-usable space needed by all attachers" is nothing but a smokescreen intended to get their competitors to subsidize their entry into telecommunications.

D. The Record Does Not Support Ground Clearances Greater than 18 Feet

The Electric utilities repeat the claims, first stated in the Electric Whitepaper, that 19.5 feet of clearance at the pole is required to yield 18 feet of ground clearance at mid-span as a result of cable sag — sag amounting to 1.5 feet.<sup>61</sup> They claim that the NESC requires 18 feet of clearance at mid-span, but in fact, 18 feet of ground clearance is only required for electric supply cables above roads, driveways, and parking lots. Communications cables, the cables occupying the lowest place on joint use poles, only require 15.5 feet of ground clearance at mid-span over these same types of ground.<sup>62</sup> Thus, adding the 1.5 feet of sag at mid-span, would require 17 feet of ground clearance at the pole, not 19.5 feet.

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<sup>61</sup> Ohio Edison at 21; AEP at 49.

<sup>62</sup> Table 232-1, Vertical Clearance of Wires, Conductors, and Cables Above Ground, Roadway, Rail or Water Surfaces, 1997 NESC.

AEP attempts to increase the required amount of sag to over 4 feet (50 inches).<sup>63</sup> This is accomplished by including the sag required for pole spans up to 300 feet. AEP appears to presume the average span is about 225 feet. Pole spans do vary, and greater spans have greater mid-span sag.<sup>64</sup> But, since this greater mid-span sag occurs in less densely populated areas, the typical ground clearance required drops from 15.5 feet to 13.5 feet. This two foot decline just offsets the greater amount of mid-span sag. If greater pole spans are used, one must account for both greater sag and lower required ground clearance.

AEP's matching inconsistent parts of the NESC is deceptive and is not supported by other electric utilities. For example, Ohio Edison recognizes 15.5 feet as the standard amount of sag the NESC requires for communications' cables.

"The NESC generally requires a minimum clearance of 15 feet 6 inches between utility cables and the ground at mid-span and minimum height of 18 feet for attachments on the pole would be sufficiently high to account for sag."<sup>65</sup>

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<sup>63</sup> AEP at 50.

<sup>64</sup> Recent forward looking cost models submitted by ILECs and IXC's support using a span of 150 feet for densely populated areas and 250 feet for less densely populated areas. See, In the Matter of Federal-State Joint Board on Universal Service Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, CC-Docket No. 96-45; CC Docket No. 97-160, July 18, 1997 at 91 CHECK PAGE "Both models use similar pole spacing assumptions that are based on density zones. Both models place poles 250 feet apart in less dense areas, and 150 feet apart in the densest areas..."

<sup>65</sup> Ohio Edison at 22.

In addition, the Commission rejected the electric utilities' "sag" argument a decade ago.

[Electric companies] assert that we must consider adding two feet for sag to our 18-foot ground clearance figure (at the pole) to comport with the 18-foot National Electrical Safety Code ("NESC") mid-span standard. However, there is no one single NESC standard. Rather, minimum NESC ground clearance depends on many factors, including whether the wires cross highways, driveways, pedestrian ways, and whether the poles are in urban or rural areas....Our selection of an 18-foot figure did not turn upon any one factor but rather reflected various elements such as differing pole heights as well as the differing NESC standards. Petitioners have not provided us with any new information to suggest that this determination was incorrect or should be changed. In sum, we believe that our 18-foot figure adequately takes into account these various elements including suitable clearance for sag."<sup>66</sup>

One wonders how long the electric utilities intend to recycle arguments that have been repeatedly rejected, without supplying any new evidence. In fact, the case has become weaker since 1990, when the NESC lowered the minimum required ground clearance for communications' cables to 15.5 feet.

#### E. Pole Accounting Issues

The electric utilities have proposed adding many accounts to rate base and expenses that would dramatically increase pole attachment rates. The Commission should reject these proposals.<sup>67</sup> These proposed accounts: 1) are already included in make-ready expenses that attachees pay on an up-front, non-recurring basis; or 2)

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<sup>66</sup> Memorandum Opinion and Order, In the Matter of Petition To Adopt Rules Concerning Usable Space on Utility Poles (RM 4558) (Usable Space Order), FCC 84-325 at 11, July 25.

<sup>67</sup> Attachment 1 describes the accounts that best reflect pole investments and expenses.

involve costs that are attributable to the transmission or distribution of electric current through the electric grid — a function solely attributable the electric company . Both poles and current-carrying facilities are required for the distribution of electricity. Yet, the electric utilities equate distribution *support* facilities with *current* distribution facilities.

- ▶ Grounding Systems (FERC Accounts 365) are investments attributable to the electric utilities' system of electric current, not support structures.
- ▶ Transformer Lightning Arrester (FERC Account 368) and their maintenance (FERC Account 595) are part of the electric utilities' system of electric current, not support structures.
- ▶ General and Intangible Plant Costs (FERC Accounts 301-303 and 389-399) are overhead charges and are already recovered through accounts allocated to Administrative Carrying Charges.<sup>68</sup> Including these accounts as part of net pole investment would result in double recovery.
- ▶ Land and Land Rights (FERC Account 360) should not be included in rate base, for permitting costs specifically related to distribution poles are already recovered in Account 364.
- ▶ Overhead Line Expenses (FERC Account 583) include expenses attributable to the electric utilities' system of electric current, not support structures. Legitimate pole-related maintenance expenses are already recovered through Maintenance of Overhead Lines (FERC Accounts 593 and 594).
- ▶ Maintenance of Miscellaneous Distribution Plant (FERC Account 598) relates to maintenance of plant on customers' premises and is not part of the distribution support network.

In its Notice, the Commission proposed a number of changes that would bring

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<sup>68</sup> In light of the massive overinvestment in fiber and other communication's facilities undertaken by the electric companies, Ohio Edison's proposal to allocate 10% of its communication equipment investment is particularly troublesome. See Ohio Edison at 28.



the Part 31 accounts currently used for pole attachment rate purposes closer to Part 32 accounts. MCI concurs with the analysis provided on this issue by NCTA. The Commission's drive for greater accuracy in converting Part 31 accounts to Part 32 accounts has been limited to changes that would increase pole attachment rates. Other improvements that would correct over-recovery and double-recovery have been ignored.<sup>69</sup> The Commission should either leave its rules unchanged, or make the corrections suggested by NCTA to correct for the over-recovery that has occurred in the transition from Part 31 to Part 32.

#### F. Pole Attachment Formula

In its Notice, the Commission identified the possibility that when pole plant is nearing complete depreciation, and net salvage value is negative, its pole attachment rate formula could result in negative rates.<sup>70</sup> In its Initial Comments, MCI showed that while there are anomalies in the Commission's pole attachment rate formula, it will never yield negative pole attachment rates. That is because, at the moment net pole investment becomes negative, the maintenance carrying charge rate also turns negative. This, in turn, causes the carrying charge rate to turn negative. The negative carrying charge percentage offsets negative pole investment in the pole rate-setting formula, always producing a positive rate.

After reviewing other parties' initial comments, it is clear that no one has shown even the theoretical possibility that pole attachment rates will become negative. SBC

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<sup>69</sup> See NCTA at 26-36.

<sup>70</sup> Notice at 9.

confirms MCI's contention that negative carrying charge rates will offset the negative net pole value.<sup>71</sup> Consequently, the Commission should leave its existing pole attachment formula untouched.

SBC goes through interesting linguistic and regulatory obfuscation in an attempt to escape the uncomfortable truth that the existing pole attachment formula cannot yield negative rates. SBC contends that in Oklahoma its "...net pole cost became negative long before SWBT has fully recovered its original investment."<sup>72</sup> This statement does not make sense. If net pole investment is negative, then poles must be fully depreciated and their costs fully recovered. What has actually happened, is the inclusion of negative net salvage expenses in the pole depreciation rate has caused more rapid recovery of the original pole investment than the useful life of the pole.<sup>73</sup>

SWBT has fully recovered its pole investments. It has recovered them, precisely because it has been able to inflate the pole depreciation rate above prescribed levels by including negative net salvage value in its pole depreciation rate. These inflated depreciation charges have been passed through to regulated local telephone customers, so even if SWBT did not apply these inflated rates to pole attachées in the early years of the pole's life, it has still fully recovered these costs, and so fully

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<sup>71</sup> SBC at 3.

<sup>72</sup> SBC at 3 and 13.

<sup>73</sup> *Id.* at 13.

recovered its pole investments.<sup>74</sup>

A careful reading of SBC's comments shows that it admits that it has fully recovered its pole investments, even as it argues it has not fully recovered its investment.

...the utility has not fully recovered its investment. However, ratepayers of the utility's regulated services have supplied depreciation expense that included both recovery of investment and an advance funding of the future cost of removal."<sup>75</sup>

What SBC means is that it believes attachees should have been solely responsible for future removal costs rather than its regulated local telephone customers. However, if recovering future removal costs was valid, it would have been appropriate to recover these costs from local telephone customers. Local customers benefitted from the poles before cable companies gained access to poles. What appears to have happened is that once SBC and other utilities began recovering pole costs from attachees, they were in a position to double-recover pole depreciation expenses — once from local telephone customers and once from pole attachees. Now that net investment has turned negative, SBC's double recovery has been reduced, although not eliminated.

SBC later plays another game of obfuscation. It points to the "serious" problem that, on SWBT's books in Oklahoma, attachers receive a "credit" of 24 cents for administrative expenses, which offsets "positive recovery in other components."<sup>76</sup> SBC

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<sup>74</sup> *Id.*, at 14.

<sup>75</sup> *Id.*, at 18.

<sup>76</sup> *Id.*, at 9.

doesn't claim that its pole attachment rate is negative though. And, in fact, its Exhibit B shows that depreciation expenses of 99 cents yield a positive attachment rate of 65 cents. SBC concludes that "...if one ignored all components other than the administrative carrying charge, then the utility would be paying the attacher to use space on the pole."<sup>77</sup> Indeed. But no one *does* ignore these other components that yield a positive pole attachment rate. SBC certainly does not ignore them.

SBC also plays a linguistic game with the Commission. SBC notes that in its Notice, the Commission concluded that due to the inclusion of negative net salvage value, pole depreciation rates produced an "excess provision for maintenance..."<sup>78</sup> SBC notes, correctly, that the formula does not permit an over-recovery of maintenance costs. However, what the Commission meant is that the inclusion of negative net salvage in the pole depreciation rate inflated the pole depreciation rate above prescribed levels in the early years of the pole's life. This, in turn, permitted an over-recovery of removal expenses in the early years. When the Commission mentioned over-recovery of maintenance costs, it was referring to the over-recovery of removal costs (a type of maintenance expense, but one that is *not* recorded in maintenance account 6411).

So, while there are anomalies associated with the existing pole attachment rate formula, the formula will always yield positive pole attachment rates. Moreover, MCI showed in its initial comments that the formula met many of the goals required of a pole

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<sup>77</sup> *Ibid.*

<sup>78</sup> *Id.*, at 14.

attachment rate formula. The existing formula permits annual rates for poles to follow the path one would expect. Rates decline as plant is depreciated. Prior to the point plant is fully depreciated, rates cover pole maintenance expenses. Once plant is fully depreciated, rates remain positive, and nearly, but not fully, recover pole maintenance expenses, thus giving the company an incentive to replace its poles once its investment has been fully recovered.

Therefore, MCI urges the Commission to retain its existing pole attachment formula. Suggested changes are at best unnecessary, and at worst will increase administrative cost, unsettle the relatively straightforward manner in which pole attachment agreements have been conducted, and create an opportunity for unjustified rate increases.

## **V. Conduit Issues**

### **A. The Commission Must Develop a Conduit Rate Formula**

Except for Con Edison, the electric utility companies are opposed to the Commission developing a conduit rate formula that would apply to electric utility conduit.<sup>79</sup> They argue that since the Commission has not yet adopted rules pertaining to conduit, there is no statutory mandate to apply the pole attachment formula to conduit. They conclude that the Commission should refrain from doing so

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<sup>79</sup> MCI conceives of conduit and trench as “structures” capable of containing one or more ducts. A conduit is usually underground or on bridges. A trench is dug into the ground. Ducts refer to single enclosed tubes, or pipes, that may be capable of carrying multiple innerducts. Innerducts subdivide a duct into smaller channels.

forevermore.<sup>80</sup> The electric utilities made the same argument opposing the development of a rate formula for transmission facilities. The argument is even less compelling in the case of conduit. In §224(a)(4) of the 1996 Act Congress explicitly stated that “poles” included conduits. Since incumbent LECs and incumbent electric utilities were both granted rights-of-way to build conduit in order to complete their networks, they have not had to arrange joint use agreements with each other. With the passage of the 1996 Act, many new players are hoping to become facilities-based providers of local telephone service. But many are facing a variety of discriminatory franchise requirements, including discriminatory fees for use of rights-of-way.<sup>81</sup> Therefore, it is imperative that the Commission develop a rate formula for conduit to ensure the economical installation of new telecommunications facilities by new entrants. There has always been a clear statutory mandate to regulate the rates for conduit attachments. The Commission has simply been spared the task of doing so until now, because distribution pole attachments have been sufficient for cable companies. Now that new local exchange providers are seeking attachments to provide local telephone service, distribution pole attachment alone is no longer sufficient. The Commission must now complete its long-delayed task of regulating conduit rates.

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<sup>80</sup> AEP at 82.

<sup>81</sup> See, e.g., Illinois Gov. Signs First State Laws on Enforcement of Telecom Act, Communications Daily July 28, 1997.

In the remainder of its Reply Comments, MCI will show that: 1) the electric utilities have sufficient information to apply a conduit rate formula; 2) circumstances in electrical conduits are not so unique so as to preclude the use of a general formula; 3) electric cable can share duct space with telecommunications cables; 4) FERC and FCC accounts capture the assets and expenses associated with conduit structures with only minor adjustments; 5) only minor modifications to the Commission's treatment of usable conduit space are required; and 6) only minor modifications to the Commission's treatment of reserve conduit space are required.

**B. The Electric Utilities Have Sufficient Information to Apply a Conduit Rate Formula**

The Electric utilities support the general terms the Commission has proposed for the conduit formula, but oppose setting presumptive levels for usable conduit space. Instead, they propose substituting the replacement cost of particular conduit routes for net linear cost of conduit, arguing that they are unable to readily determine the number of feet of conduit or the number of ducts deployed in their conduit systems. Requiring them to estimate the number of conduit feet would impose an unneeded expense.<sup>82</sup>

The record in this proceeding strongly suggests that producing reliable estimates of the length of their conduit systems would involve a minimal burden on the utility companies. Two utility companies seem to have obtained estimates of the length of their conduit systems with minimal difficulty. Con Edison has produced estimates of

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<sup>82</sup> AEP at 83, 91.

its conduit length and cost.<sup>83</sup> Ohio Edison is of two minds on the question. At one point it claims it has “5,300 miles of underground cable and controlling ducts, conduits, and rights-of-way.”<sup>84</sup> Yet later, it claims that it “...is not capable of readily computing its conduit investment on per linear meter or footage basis.”<sup>85</sup>

MCI finds it hard to believe that utility companies are unable to produce reliable estimates of conduit length and cost. In order to install the conduit, they first had to receive permission to do so from municipalities. This would have required making an application; identifying the route the conduit would cover; and describing any special construction steps that would be required to deal with natural hazards and protect the public safety during the installation.

Instead of a general rate formula, the electric utilities propose market-based rates that account for the unique cost associated with specific routes. MCI does not understand why it would be less difficult for the electric utilities to estimate the replacement costs of each and every conduit route requested by a new entrant seeking joint use of their conduit than to estimate the average length of conduit.<sup>86</sup> Common sense suggests it would be much more time consuming, and arbitrary, to follow the electric utilities’ method. Apparently, the electric utilities don’t mind significant additional expense, so long as it turns the rate-setting formula into a fig-leaf for the

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<sup>83</sup> Con Edison, Appendix A.

<sup>84</sup> Ohio Edison at 7.

<sup>85</sup> *Id.*, at 43.

<sup>86</sup> AEP at 91.



establishment of market-based rates. History shows that setting presumptive averages for poles has greatly reduced confusion, minimized administrative and survey expense, and equalized bargaining power. Setting a presumptive number of ducts per conduit, average innerducts per duct, and calculating net investment per foot, will have the same benefits.

C. Circumstances in Electrical Conduits Are Not So Unique as to Preclude the Use of a General Rate Formula

Electric utilities maintain that conduit systems exhibit a wide degree of variation. They differ according to size, design, geography, weather, water, and soil conditions.<sup>87</sup> However, design differences will be reflected in the conduit account values specific to each utility. Costs associated with the transition to a joint conduit use environment will also be captured by these accounts. Furthermore, many of the unique costs associated with arranging joint use of conduit, such as conduit capacity survey, preparation, and attachment expenses will probably be recovered through make-ready charges, as they are in the case of pole attachments.

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<sup>87</sup> AEP at 88 .